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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,799	11/26/2003	Toshio Ichikawa	008312-0307053	5095

909 7590 01/04/2007
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EXAMINER

PATEL, GAUTAM

ART UNIT	PAPER NUMBER
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2627

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/721,799	ICHIKAWA, TOSHIO	
	Examiner	Art Unit	
	Gautam R. Patel	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/23/05; 6/27/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-20 are pending for the examination.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. § 119(a)-(d), which papers have been placed of record in the file.

Specification

3. The disclosure is objected for following reasons.

The title of the invention is neither precise nor descriptive. A new title is required which should include, using twenty words or fewer, claimed features that differentiate the invention from the Prior Art. It is recommended that the title should reflect the gist of or the improvement of the present invention.

Correction is required.

Claim Rejections - 35 U.S.C. § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-20 are rejected under 35 U.S.C. § 102(e) as being anticipated by Shiozaki et al., US. patent 6,920,099 (hereafter Shiozaki).

As to claim 1, Shiozaki discloses the invention as claimed [see Figs. 1-2] including a controller, a laser output determination circuit, and a sampling circuit, comprising:

a controller [fig. 1, unit 20] which determines a linear velocity at the time of rotating a disk on the basis of given operation information and control information read from the disk;

a laser output determination circuit [fig. 1, unit 5 & 15] which determines a read laser output of a photodiode [fig. 1, unit 3 PD] corresponding to the linear velocity determined by the controller and causes the photodiode to emit a laser light on the basis of a control signal corresponding to the determined read laser output; and

a sampling circuit [fig. 1, unit 5 & 6] which detects a laser light emitted by the photodiode and makes the control signal of the laser output determination circuit appropriate

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according to a sampling result obtained by performing the detection several times [col. 3, line 66 to col. 4, line 23; col. 6, lines 27-37 & col. 7, lines 58-67].

NOTE: linear velocity is related to power and sampling of power also samples linear velocity.

5. The aforementioned claim 2, recites the following elements, inter alia, disclosed in Shiozaki:

the laser output determination circuit determines the read laser output in proportion to a value of the linear velocity, and causes the photodiode to emit a laser light on the basis of a control signal corresponding to the determined read laser output [col. 3, line 66 to col. 4, line 23; col. 6, lines 27-37 & col. 7, lines 58-67].

6. The aforementioned claim 3, recites the following elements, inter alia, disclosed in Shiozaki:

when a value of the linear velocity exceeds a predetermined threshold value [R/BPRef], the laser output determination circuit changes the read laser output to a predetermined value previously prepared, and causes the photodiode to emit a laser light on the basis of a control signal corresponding to the determined read laser output[col. 3, line 66 to col. 4, line 23; col. 6, lines 27-37 & col. 7, lines 58-67].

7. The aforementioned claim 4, recites the following elements, inter alia, disclosed in Shiozaki:

the laser output determination circuit determines a read laser output of a photodiode according to the linear velocity in consideration of management information of the disk and operation information such as a user-desired recording velocity and the like [col. 3, line 66 to col. 4, line 23; col. 6, lines 27-37 & col. 7, lines 58-67].

8. The aforementioned claim 5, recites the following elements, inter alia, disclosed in Shiozaki:

a processing section [fig. 1, units 20, 21, 22 and 23] which performs reproducing processing and recording processing for the disk according to a laser light emitted in the laser

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output determination circuit. [col. 3, line 66 to col. 4, line 23; col. 6, lines 27-37 & col. 7, lines 58-67].

9. The aforementioned claim 6, recites the following elements, inter alia, disclosed in Shiozaki:

a controller [fig. 1, unit 20] which determines a linear velocity in order to rotate a disk at a constant angular velocity by CAV (Constant Angular Velocity) [col. 8, line 42 to col. 9, line 20 & col. 10, lines 13-42] control on the basis of given operation information and control information read from the disk;

a laser output determination circuit [fig. 1, unit 5 & 15] which determines a read laser output of a photodiode according to the linear velocity determined by the controller in addition to the control information and the operation information, and causes the photodiode to emit a laser light on the basis of a control signal corresponding to the determined read laser output; and

a sampling circuit [fig. 1, unit 5 & 6] which detects a laser light emitted by the photodiode, and makes the control signal of the laser output determination circuit appropriate according to a sampling result obtained by performing the detection several times [col. 3, line 66 to col. 4, line 23; col. 6, lines 27-37 & col. 7, lines 58-67].

NOTE: linear velocity is related to power and sampling of power also samples linear velocity.

10. The aforementioned claim 7, recites the following elements, inter alia, disclosed in Shiozaki:

the laser output determination circuit determines the read laser output in proportion to a value of the linear velocity, and causes the photodiode to emit a laser light on the basis of a control signal corresponding to the determined read laser output [col. 3, line 66 to col. 4, line 23; col. 6, lines 27-37 & col. 7, lines 58-67].

11. The aforementioned claim 8, recites the following elements, inter alia, disclosed in Shiozaki:

a value of the linear velocity exceeds a predetermined threshold value [R/BPRef], the laser output determination circuit changes the read laser output to a predetermined value

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previously prepared, and causes the photodiode to emit a laser light on the basis of a control signal corresponding to the determined read laser output [col. 3, line 66 to col. 4, line 23; col. 6, lines 27-37 & col. 7, lines 58-67].

12. The aforementioned claim 9, recites the following elements, inter alia, disclosed in Shiozaki:

the laser output determination circuit determines a read laser output of a photodiode according to the linear velocity in consideration of management information of the disk and operation information such as a user-desired recording velocity and the like [col. 3, line 66 to col. 4, line 23; col. 6, lines 27-37 & col. 7, lines 58-67].

13. The aforementioned claim 10, recites the following elements, inter alia, disclosed in Shiozaki:

a processing section [fig. 1, units 20, 21, 22 and 23] which performs reproducing processing and recording processing for the disk according to a laser light emitted by the laser output determination circuit [col. 3, line 66 to col. 4, line 23; col. 6, lines 27-37 & col. 7, lines 58-67].

14. As to claims 11-20, they are method claims corresponding to claims 1-10 respectively and they are therefore rejected for the similar reasons set forth in the rejection of claims 1-10 respectively, above.

Other prior art cited

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) Koudo et al. (US. Patent 6529456)
- b) Muramatsu et al. (US. patent 5592463)
- c) Higashino (US. patent 6643247)
- d) Hagiwara et al. (US. patent 6987717)

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Contact information

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is 571-272-7625. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2600) where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Dwayne Bost, who can be reached on (571) 272-7023.

Any inquiry of a general nature or relating to the status of this application should be directed to the Electronic Business Center whose telephone number is 866-217-9197 or the USPTO contact Center telephone number is (800) PTO-9199.


GAUTAM R. PATEL
PRIMARY PATENT EXAMINER

Gautam R. Patel
Primary Examiner
Group Art Unit 2627

December 28, 2006